

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An apparatus—A protection circuit for protecting a MOS component from the antenna effect, the apparatus comprising:

a bypass PMOS transistor, having a gate, a source and a substrate, all coupled to a first voltage node and a drain coupled to a gate of the MOS component; wherein when positive charges are accumulated on the gate of the MOS component due to antenna effect, the bypass PMOS transistor conveys the positive charges to the first voltage node to prevent the positive charges from entering and damaging the MOS component; and

a bypass NMOS transistor, having a gate, a source and a substrate, all coupled to a second voltage node and a drain coupled to the gate of the MOS component; when negative charges are accumulated on the gate of the MOS component due to antenna effect, the bypass NMOS transistor conveys the negative charges to the second voltage node to prevent the negative charges from entering and damaging the MOS component

wherein when positive charges are accumulated on the gate of the MOS component due to antenna effect, the bypass PMOS transistor dissipates the positive charges to the first voltage node; and when the negative charges are accumulated on the gate of the MOS

component due to antenna effect, the bypass NMOS Transistor
dissipates the negative charges to the second voltage node.

2. (Withdrawn) A method for protecting a MOS component from antenna effect, comprising:

Disposal, between a first voltage node and the MOS component, of a bypass PMOS transistor the gate, the source and substrate of which are coupled to the first voltage node and the drain of which is coupled to the gate of the MOS component; and

Disposal, between a second voltage node and the MOS component, of a bypass NMOS transistor the gate, source and substrate of which are coupled to the second voltage node and the drain of which is coupled to the gate of the MOS component;

wherein when positive charges are accumulated on the gate of the MOS component due to antenna effect, the bypass PMOS transistor conveys the positive charges to the first voltage node to prevent the positive charges from entering and damaging the MOS component; when negative charges are accumulated on the gate of the MOS component due to antenna effect, the bypass NMOS transistor conveys the negative charges to the second voltage node to prevent the negative charges from entering and damaging the MOS component.